EARLY CARE AND EDUCATION

Access

Executive Summary

From birth to age three, brain development is more sensitive to environmental influence than at any other time. During this same period, out-of-home care is hard to find, expensive and largely of poor quality. Access to high quality early care and education (ECE) settings from birth to five years can boost parental employment stability, improve jobs for providers, and have significant long-term impacts on education, health, and well-being for the children cared for in such environments. The use of public investments to provide full access to such environments has a return of between $2 and $10 in combined public savings and revenue for each dollar invested.

Full access to high quality care for children birth to five across income levels and the rural to urban landscape is essential to generating strong returns on the investment. In the five Southern Indiana Louisville-Metro (SILM) counties (Clark, Floyd, Harrison, Scott, and Washington) 77.4% of children birth to age five live in households where all parents work.[1] The number of licensed child care slots in those counties ranged in 2016 from 9.1 slots per 100 kids birth through age five in Scott County to 33.8 slots per 100 kids birth through age 5 in Floyd County, down from highs of 22.4 (2008) and 36.5 (2010), respectively (Figure 1).[2]

Population declines and the aging Southern Indiana population in rural areas (particularly Scott and Washington counties) have contributed to the decrease. These figures control for the number of children birth to five, but may not account for community impacts of growth in the portion of the population over age 65 on various community amenities and public services. Few areas in the region have seen growth in the population of households with young children. Among ECE slots known to be high quality (Paths to QUALITY™ Level 3 or 4), the range is a low of 2.5 slots per 100 children *under* age 5 in Washington County to a high of 12.3 slots per 100 children *under* age 5 in Harrison County (Figure 2).[3]

Availability of high quality care is one of several factors that affect access. Across the country, access to quality Early Care and Education (ECE) is constrained by the following:

* Availability.
* Affordability.
* Flexibility of arrangements.
* Location and transportation.
* Capacity of providers to care for children with special needs.
* Provision of care for sick children.

This issue brief presents access challenges nationally and describes what we know about access to high quality ECE in SILM.

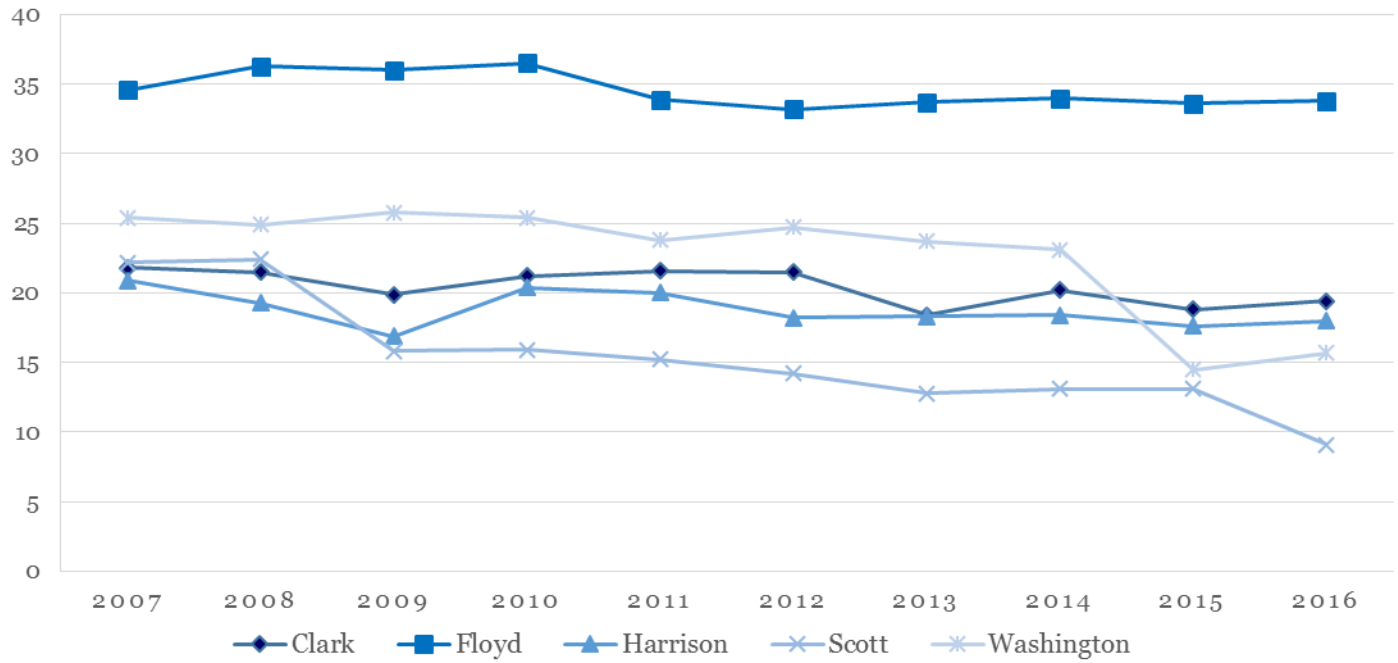
Availability of Child Care Slots

American families employ a number of strategies for meeting child care needs. Many of these strategies operate beyond our ability to track. This means that we cannot determine their role in shaping access nor can we discern whether these are high quality arrangements that support the health and full development of the children in care. *Research, however, is clear that center-based care is generally of a higher quality and yields better outcomes than home-based care. The care we are least able to track or regulate is delivered through home-based providers.*

Lack of access to high quality affordable options that meet parents' and childrens' needs leads many to seek care in the under-the-table market. The following ECE options lack full documentation and often operate without regulatory oversight:

* Siblings

Figure 1: Licensed Child Care Slots per 100 Children Ages 0-5 by County, 2007-2016



Source: Annie E. Casey Foundation. 2018. "Licensed Child Care Slots per 100 Children, Ages 0-5, 2007-2016." *KIDS COUNT Data Center*. https://datacenter.kidscount.org/.

* Grandparents
* Other relatives
* In-home care by a non-relative
* Care in a provider's home not registered as a family day care.

The U.S. Census Bureau reported that roughly 40.6 percent of children under 5 who were in some type of child care in 2011 were cared for in such arrangements.[4] An additional 21.3 percent were cared for by a parent during times when the survey's reference parent was working.[5] These figures may reflect some residual impacts of lethargic employment rates coming out of the recovery from the 2008 recession, but there is no reason to think they've changed significantly.

Center-based care is the best documented and regulated, and provides the highest quality care.[6] Among registered providers in SILM, 40.4% are secular center-based or school based programs and these programs serve 52.9% of children enrolled in registered programs (Figure 4).[7] These figures are encouraging, until we remember that over 50% of SILM children birth to five with all parents in the household working are not enrolled in registered programs.[8] The 52.9% of those enrolled in registered programs that are in center and school based programs likely represent around 25% of children birth to 5 who live in homes where all parents work. Moreover, the 28.0%-56.6% of providers (across the 5 counties) that deliver care in formal settings also represents a far smaller portion of all care options utilized by families in the region (Figure 4).

Availability of Child Care Slots

While more than three-quarters of children under 5 likely need some sort of non-parental care arrangement, SILM counties have fewer than 26 licensed child care slots per 100 children under age 5, leaving at least half of area children in largely unregulated care (Figures 3 & 4). Indiana has a voluntary certification option for Child Care Development Fund (CCDF) voucher eligibility that provides a rough equivalent to licensure, but without the full licensing procedure. This fact muddies the waters on our numbers. School based pre-school programs are also exempt from state licensure as

they receive accreditation through other means. This means our figures may understate the share of programs meeting some licensure and quality standards. Even with these data caveats, we can see that low supply of quality center-based options constrains access to high quality ECE.

Scott County has less than 10 licensed child care spots per 100 children under age 5 and Washington County has fewer than 18 (Figures 3 and 4). Both counties' economies are weak and many residents commute out of county for work. They likely seek care close to their places of employment. Commuting patterns are definitely a factor shaping demand and supply; however, lack of child care options may also shape commuting patterns.

Parents make choices based on what is available in their area or near their work and within the limits of what they can afford. Cultural biases may favor home-based care options and combine with convenience, in terms of both location and flexibility, and the cheaper price tag (excluding nanny arrangements), to produce widespread use of unlicensed providers of unknown quality that may operate beyond the oversight of health and safety regulations. This means parent choices increase demand for a supply of informal arrangements. At the same time, dysfunctional market dynamics deter entrepreneurship in the area of high quality center-based care.

High Costs of Providing Quality Care

Access to high quality ECE is limited by supply. As noted, to achieve and document quality requires time and financial resources. In a market unable to bear those costs, most providers do not see pursuing such advances as financially feasible or worth the time.

Providing quality child care is expensive, requires expertise in child development, the ability to work well with children and parents, strong business and management skills to navigate funding streams and ensure a sustainable business model, and the capital necessary to establish and improve facilities and programs.[9] The median family income across SILM counties ranges from $54,862 in Washington County to $72,466 in Floyd County, which means half of all family households are earning less than those amounts in each of those counties (Figure 5). Families with young children are likely to be in a lower portion of the income distribution than those with longer standing work histories and careers. Many families are not in a position to pay what it costs for a provider to deliver high quality care. This reality acts as a deterrent to those who may be interested in owning and operating quality child care centers, and it limits the high quality care options available to families, thus limiting access.

Figure 2: Quality ECE Slots per 100 Children under Age 5 by County, 2017

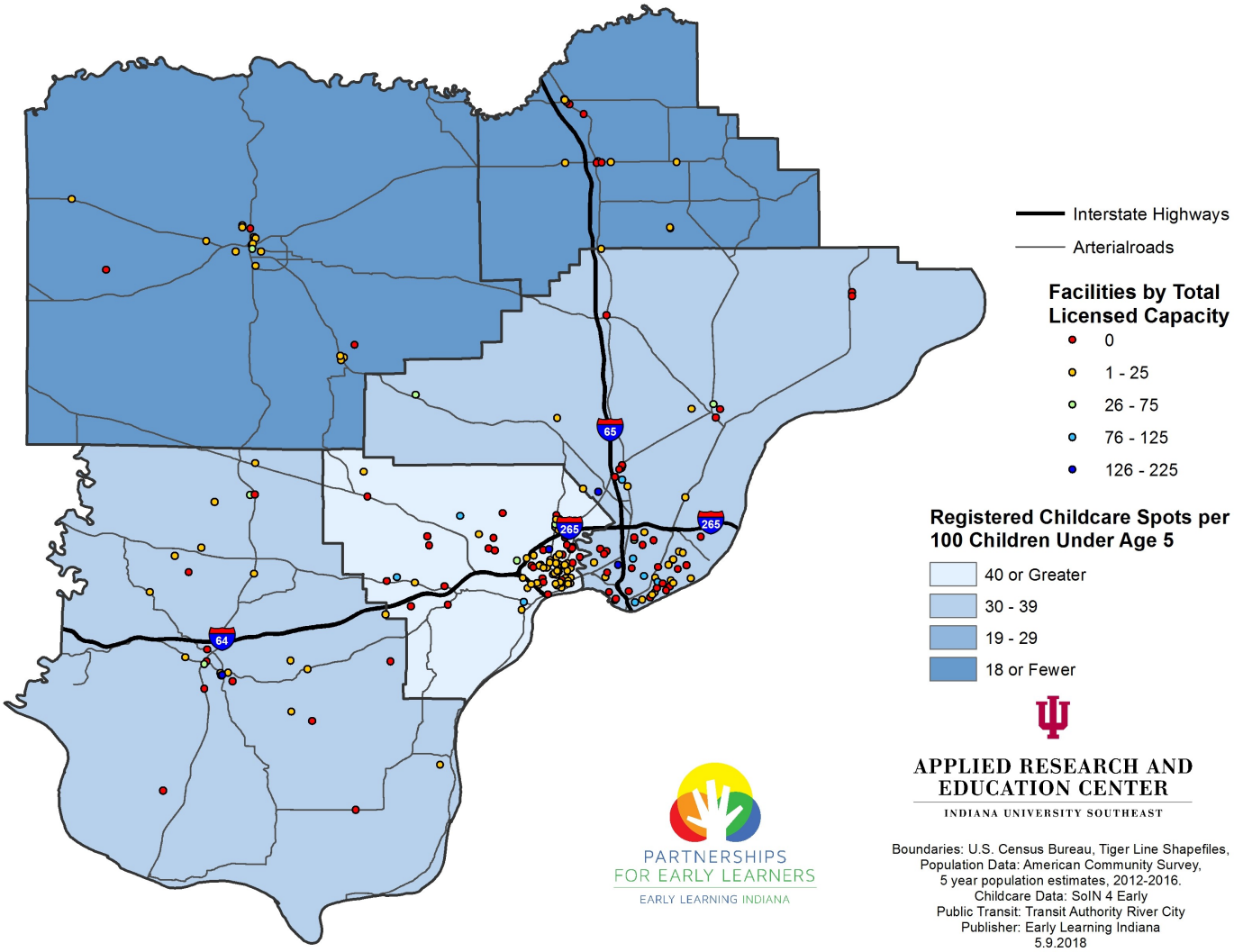
	Population Under Age 5	High Quality Slots Available	Number of High Quality Slots (PTQ™ Levels 3 and 4) per 100 Children Under Age 5
Clark	7,273	515	7.1
Floyd	4,542	492	10.8
Harrison	2,279	280	12.3
Scott	1,370	56	4.1
Washington	1,577	40	2.5
Totals	17,041	1,383	8.1

Sources: U.S. Census Bureau. 2017. "Table B09001: Population Under 18 Years by Age." American Community Survey 5-Year Estimates, 2012-2016. www.census.gov; Southern Indiana Economic Opportunity Corporation, Resource and Referral data as of July 2017.

Flexibility to Meet the Needs of Workers

In addition to the general shortage of child care slots, the same market dynamics that make building a viable business in high quality child care difficult, make it very hard to provide flexible care options that meet the needs of today's workforce. The standard model is child care that begins between 6:00 a.m. and 7:30 a.m. and ends at 6:00 p.m. to accommodate parents whose workdays begin at 8:00 a.m. and end around 5:00 p.m. To maintain a slot, parents pay for this schedule five days per week whether they use it daily or not. This schedule has always left some families underserved and struggling to find

Figure 3: Licensed Spots per 100 Children under Age 5 and Licensed Capacity of Registered Providers



workable arrangements, but changes in work have likely increased the number of families affected.

Over the last 20 years, the U.S. economy has seen a significant increase in part-time and contingent labor.[10] Low-income families are likely to include workers who piece together multiple part-time jobs with weekly and seasonal work schedules that change frequently.[11] Work schedules may also include evening, overnight, and weekend hours. Many jobs lack stability so low-income workers' schedules frequently change. These dynamics make it difficult to find and use stable quality child care that can adapt to meet inconsistent needs that may stretch well beyond the traditional work week.

Constrained by child to teacher ratio requirements and low operating margins, ECE providers find it difficult to offer options that serve inconsistent needs, part-time work, and nontraditional hours.

Location and Transportation

The SILM region is a mix of rural and suburban communities. Many low-income families face significant transportation challenges that affect both their work opportunities and their ability to access quality child care. For those living in rural parts of Clark and Floyd counties and anywhere in Harrison, Scott or Washington counties, public transportation is not available.

Low population density makes the business model for center-based care for birth to three care even

Figure 4: Center Based Programs as Percent of Total and Percent of Children Enrolled in Secular Care Centers as Percent of Total Children Enrolled in Known Programs

County	Percent of Registered Providers that are Secular Center or School-Based (includes Headstart)	Percent of Children enrolled in Registered Programs that are in Secular Child Care Center and School Based Programs (includes Headstart)
Washington	28.0%	29.8%
Floyd	29.9%	49.6%
Harrison	41.7%	48.4%
Scott	42.9%	34.1%
Clark	56.6%	63.3%
Totals	40.4%	52.9%

Source: Southern Indiana Economic Opportunity Corporation (SIEOC), Resource and Referral data as of July 2017.

more difficult (Figure 3). Among those serving rural communities, many are not licensed and even fewer are on Paths to QUALITY™. A current pilot program in Harrison County includes school-based pre-K for four-year-olds and uses the public school bus system in part of the county to transport four-year-olds to all day pre-K. This works well for four-year-olds, but does not provide a viable option for children birth to age three.

In the more densely populated communities along the Ohio River, the Transit Authority of River City (TARC) provides limited routes on limited schedules (See routes in orange in Figure 6). This means parents that use public transportation may constrain their search to affordable options close to home or close to work, with little room to concern themselves with quality. Only two Level 4 rated Centers sit directly on the public transit routes in southern Indiana (Figure 6). A handful of other providers are located right on transit routes, but the majority require significant walking or other transportation to get from transit stops to child care facilities.

Care for Children with Special Needs

Parents of children with special needs, especially poor and low-income parents, have a particularly difficult time finding care because there are simply fewer high-quality, inclusive child care settings.[12]

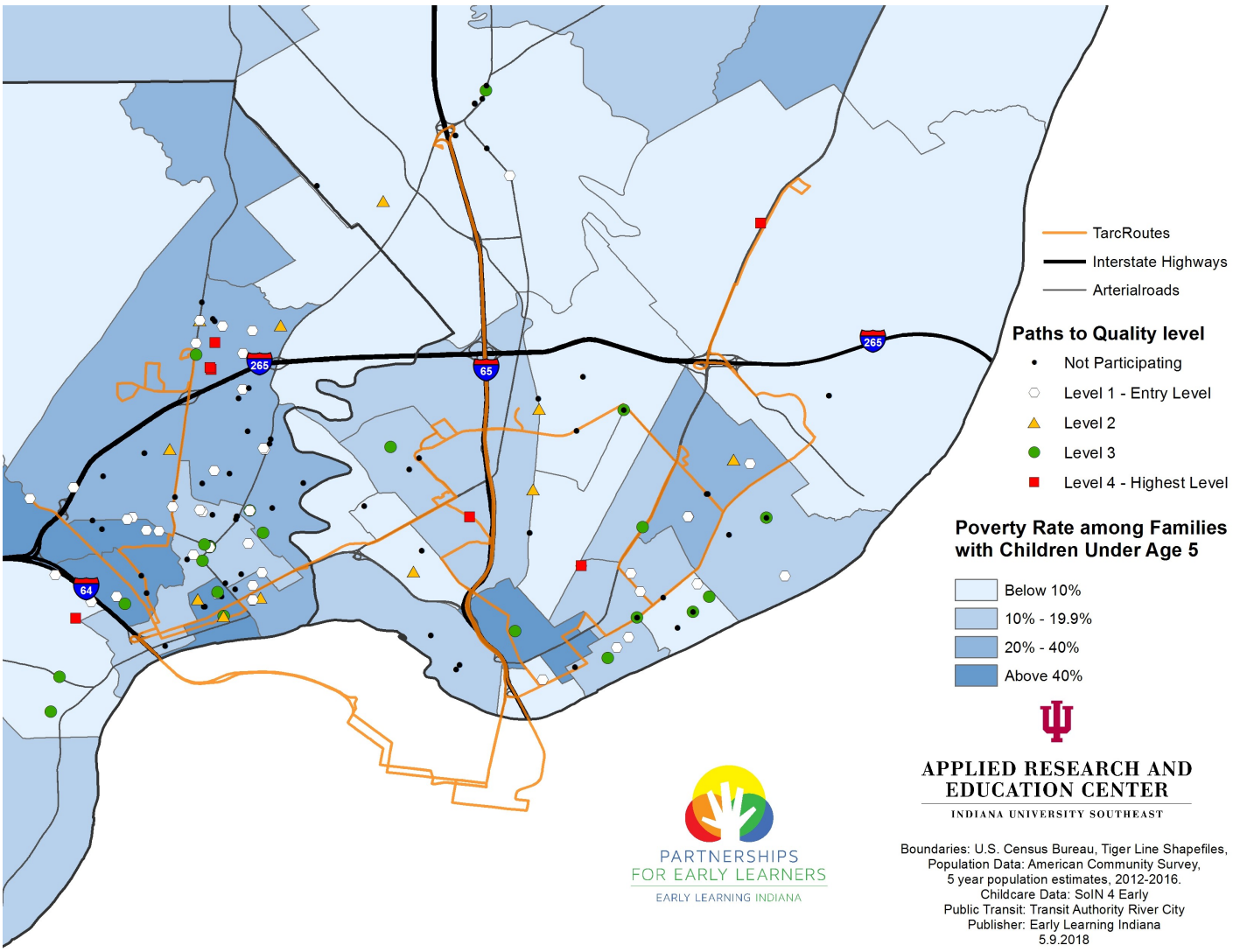
> *Under Part C of the Individuals with Disabilities Education Improvement Act (IDEA, 2004), agencies providing early intervention services are to facilitate access to early care and education for children with disabilities. The Americans with Disabilities Act (ADA) requires that children with disabilities be accepted by child care centers if that can be accomplished with "reasonable modifications" (U.S. Department of Justice, Civil Rights Division, Disability Rights Section, 1997, General Information section, para 1). Yet many child care programs (both home- and center-based) simply do not accept children with disabilities (Booth*

Figure 5: Median Family Income by County, SILM 2012-2016

Location	Median Family Income
United States	$67,871
Indiana	$62,748
Clark	$64,568
Floyd	$72,466
Harrison	$64,643
Scott	$55,040
Washington	$54,862

Source: U.S. Census Bureau. 2017. "Table B19113: Median Family Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars)." *American Community Survey 5 Year Estimates, 2012-2016*. www.census.gov.

Figure 6: Poverty and Public Transportation Access to Care by Quality Rating



& Kelly, 1999). These programs routinely argue that they cannot accept children with disabilities because they do not have adequate staff or the staff does not have specialized training (Booth & Kelly, 1998, 1999; Warfield & Hauser-Cram, 1996).[13]

In response to the need for high quality inclusive care and in compliance with the ADA and IDEA provisions, the state of Indiana has a structure in place intended to increase the availability and quality of care for children with special needs. The Indiana Partnership for Inclusive Child Care (IPICC) works in collaboration with the Indiana Association for Child Care Resource and Referral to increase the quantity and quality of care available for children with special needs.

Every Indiana child care resource and referral agency has an inclusion specialist that can provide training, on-site technical assistance, resources and other disability-related services to assist providers in serving children with special needs.[14] Inclusion specialists offer trainings throughout the state on a monthly basis and provide monthly webinars.

Time spent in these trainings counts toward licensing or Paths to QUALITY™ training hours. This means that gaining competency in these areas is at least lightly incentivized through the quality recognition and reward programs.

Formal center based care may be well positioned to meet ADA requirements and may have staff more

likely to be trained to meet such needs. In less densely populated areas, however, the demand may be lower and is likely to vary from year to year. Maintaining staff and directing resources to supplies and appropriate training may be difficult.

In these contexts, trained providers who can deliver services in the child's home offer a likely solution. This response, however, denies the child social benefits of the center-based environment and of experiences in a structured setting that prepares them for formal schooling. While the range of early child care providers who indicate they provide special need services reaches 87% in Clark County, it is a much lower 56% in rural Washington County.[15] Moreover, the figures reflect that they address special needs, but do not indicate more specific information on what providers can accommodate.

Sick Children

The average American working parent misses nine days of work per year. That number goes up as kids move through elementary school.[16] While some of those absences are the result of child care disruptions unrelated to illness, providers do not permit children to attend child care when they are ill. Working parents must stay home or make other arrangements to accommodate illness. For many parents, especially those working for a low hourly wage, such absences from work can lead to lost wages or even termination. Professional parents in salaried positions may have more flexibility, but they also experience significant losses in productivity or disruption to their roles as the result of missing work to care for a sick child.

The negative impacts of child illness on parents' work lives mean that parents often make poor choices that are not in the best interests of their own child or others. Parents may send a mildly ill child to day care, placing others in the setting at risk of contracting the illness. At the same time physicians worry that some medical exclusion policies burden families with unnecessary doctors' visits or may incentivize problematic responses to minor illness, such as a request for antibiotics so a child can more quickly return to the care setting.[17]

To avoid labor disruptions, transmission of illness in child care settings, overuse of antibiotics and physician time, home-based sick child care could be incentivized and subsidized to ensure options are available. Payroll taxes and other mechanisms of employer investment are potential finance mechanisms for such a system. Emerging community health worker models for delivering care may combine with early childhood education and care certification to develop a workforce well-suited to address this need. In rural communities, individuals could earn a certification for community health work and a child development associates' degree to build a tool kit for meeting sick child care needs and facilitating telemedicine, which may help create a more viable income model for such contingent labor.

Employers that rely on contingent labor and nonstandard work schedules and communities whose economies rely on round the clock and contingent workers have a role to play supporting the work support systems necessary to accommodate these schedules. Institutional structures for early care and education need to match economic and work structures.

Summary and Recommendations

Dozens of studies document the benefits of high quality care to children, parents, employers, communities, and the economy. Nevertheless, the majority of families still lack ready access to high quality environments for children birth to five years old, and especially for infants and toddlers from birth to age three. Market assumptions do not hold in the child care sector. Those who need the service do not earn enough to pay for high quality care and they cannot forego care for their children.

Access to quality care requires increases in the following:

* Supply of quality care—improve quality of existing care and develop new high quality care.
* The availability of care in child care deserts (areas where few, if any, providers exist to serve families with young children).

* The availability of off-hours, part-time, and irregularly scheduled care options.
* Quality care options for infants and young children with special needs.
* Sick-child care.

Increasing access to high quality care requires that communities approach early care and education not only as a personal responsibility, but as a public good and an employment service.

* Provide small business supports (technical assistance and business start-up subsidies) to ECE proprietors.
* Support work force development through education and training subsidies and wage supports to professionalize ECE and increase the supply of qualified caregivers and teachers.
* Use school bus systems, public facilities, and spaces in private businesses and organizations to reduce overhead costs.
* Provide tax credit opportunities for businesses that renovate to provide onsite child care.
* Employers that rely on contingent labor and multiple shifts have a role to play in subsidizing drop-in, irregular schedule, and night care for their labor force. These supports may include subsidies to access care and/or direct support to centers and programs designed to meet these particular needs.

Increasing access to quality care that meets workforce needs has the potential to improve our economy and quality of life.

Endnotes

[1]U.S. Census Bureau. *American Community* Survey, 5-Year Estimates 2012-2016. Table B23008.
[2]KIDS COUNT Data Center. https://datacenter.kidscount.org/.
[3]Southeastern Indiana Economic Opportunity Corporation (SIEOC) July 2017 data provided at author's request.
[4]Laughlin, Lynda. 2013. "Who's Minding the Kids? Child Care Arrangements: Spring 2011." Washington, D.C.
[5]"In households where both parents are present the mother is the reference parent. Questions on the child care arrangement for each child are asked of the reference parent. If the mother is not available for an interview, the father of the child can give proxy responses for her. In single-parent families, the resident parent is the reference parent. If neither parent is in the household, the guardian is the reference parent. Reference parents include biological, step- and adoptive parents, or other relatives/nonrelatives acting as a guardian in the absence of parents." Source: Laughlin, Lynda. 2013.
[6]Note: Comparative research that looks closely at a range of organizational structures and arrangements supports the claim that center-based care provides the highest quality. This does not mean that high quality does not exist in other arrangements, but taken together, looking at a variety of quality measures combined, formal care settings outperform informal care settings. Bassok, Daphna, Maria Fitzpatrick, Erica Greenberg, and Susanna Loeb. 2016. "Within- and Between-Sector Quality Differences in Early Childhood Education and Care." *Child Development* 87(5):1627-1645. Loeb, Susanna. 2016. "Missing the target: We need to focus on informal care rather than preschool." *Economic Studies at Brookings: Evidence Speaks Reports* 1(19): 1-5. https://www.brookings.edu/research/missing-the-target-we-need-to-focus-on-informal-care-rather-than-preschool/.
[7]Applied Research and Education Center (AREC) calculations based on Southeastern Indiana Economic Opportunity Corporation (SIEOC) data as of July 2017.
[8]Population figures for children with all parents in the household working, U.S. Census Bureau. American Community Survey, 5-year Estimates 2012-2016. Table B23008; Enrollments in quality programs vs. known programs, Early Learning Advisory Committee. 2018 ELAC County Dashboards. http://www.elacindiana.org/data/early-childhood-profiles/.
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[11]Chaudry, Ajay, Taryn Morrissey, Christina Weiland, and Hirokazu Yoshikawa. 2017. *Cradle to Kindergarten: A New Plan to Combat Inequality*. New York, NY: Russell Sage Foundation.
[12]Wall, Shavaun, Ellen E. Kisker, Carla A. Peterson, Judith J. Carta, and Hyun-Joo Jeon. 2006. "Child Care for Low-Income Children with Disabilities: Access, Quality, and Parental Satisfaction." *Journal of Early Intervention* 28(4): 283-298.
[13]Booth, C. L., & Kelly, J. F. 1998. "Child-care characteristics of infants with and without special needs: Comparisons and concerns." *Early Childhood Research Quarterly* 13: 603–621; Booth, C. L., & Kelly, J. F. 1999. "Child care and employment in relation to infants' disabilities and risk factors." *American Journal on Mental Retardation* 104(2), 117–130; Booth, C. L., & Kelly, J. F. 2002. "Child care effects on the development of toddlers with special needs." *Early Childhood Research Quarterly*17: 171–196 as cited in Wall et al. 2006.
[14]Indiana Association for Child Care Resource and Referral. "Caring for Children with Special Needs." http://www.iaccrr.org/default.cfm?page=caring-for-children-with-special-needs.
[15]Early Learning Indiana, Resource data received upon Request July 31st, 2018.
[16]Carillo. 2004. "A totally new way to think about back-up care." Work& Family Connection. Guest Column. Retrieved 02-10-2018 using waybackmachine.com (https://web.archive.org/web/20040619113444/http://www.workfamily.com:80/open/work-life-guest-columncarrillo.asp).
[17]Pappas, MD, JD, Diane F., Richard H. Schwartz, MD, Michael J. Sheridan DSc, and Gregory F. Hayden, MD. 2000. "Medical Exclusion of Sick Children from Child Care Centers: A Plea for Reconciliation." *Southern Medical Journal* 93(6): 575-578.

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